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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,368	02/08/2002	Ryusuke Hasegawa	H0002699 (4710)	1788

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EXAMINER

NGUYEN, TUYEN T

ART UNIT PAPER NUMBER

2832

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/071,368

Applicant(s)

HASEGAWA ET AL.

Examiner

TUYEN T. NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,5,7,8 and 11-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,5,7,8 and 11-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by Petzold et al. [WO99/45643].

Petzold et al. discloses a filter comprising an inductor having a core that consists essentially of an Fe-base amorphous metal alloy ribbon and has a substantially constant permeability over a frequency range about 1 to 1000kHz. Petzold et al. further discloses the core having a permeability in a range of 400 to 1000 over a frequency range of 1 to 1000kHz [figure 5]. Petzold et al. discloses a linear B-H loop of the device [figure 3].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-5, 7-8, 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihito et al. [UK 2,138,215 A] in view of Hilzinger et al. [US 4,812,181].

Yoshihito et al. discloses a filter comprising an inductor having a core that consists essentially of an Fe-base amorphous metal alloy ribbon and has a substantially constant permeability over a frequency range about 1 to 1000kHz and a field strength range of approximately -15 to +15 Oe [figures 5-6 and 8].

Yoshihito et al. discloses the instant claimed invention except for the device having a linear B-H loop.

Hilzinger et al. discloses an amorphous magnetic ribbon for a magnetic core [figure 1] having a linear B-H loop.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the magnetic ribbon with linear B-H loop characteristics of Hilzinger et al., in Yoshihito et al., for the purpose of improving magnetic properties.

Response to Arguments

Applicant's arguments filed 05/25/2005 have been fully considered but they are not persuasive.

Applicant argues that:

[1] Quote: "As claim 1 of Yoshihito illustrates, the Yoshihito core requires a physical gap in the core, whereas the core of the present invention does not recite a gap and yet has a good DC current superposition characteristics and a high permeability reaching as high as 2700 (see Fig. 8 of the present application)."

[2] Petzold's core does not consist essentially of an Fe-based amorphous material.

[3] Quote: "Regarding claim 12 of the present application, Petzold discloses a permeability in a range of 1000 to 50,000 over a frequency range of 1 to 1000 kHz (1MHz), as

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Fig. 5 of the corresponding U.S. Petzold '808 indicates, which is a different range from the permeability range of 400 to 1000 in claim 12 of the present application.”

The examiner disagrees.

Regarding [1], applicant has not preclude any gap structure in the magnetic core in the claimed invention. Applicant has not claimed, nor has examiner considered, any structure of the device in the claimed invention which “*does not recite a gap and yet has a good DC current superposition characteristics and a high permeability reaching as high as 2700* (see Fig. 8 of the present application).”

Regarding [2], Petzold et al., [from US 6,559,808], discloses the magnetic core can be made of some amorphous iron-based alloy [column 3, lines 45-51 of US 6,559,808].

Regarding [3], Petzold et al., in figure 5, shows the permeability in a range of 400 to 1000 over a frequency range of 1 to 1000kHz.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUYEN T. NGUYEN whose telephone number is 571-272-1996. The examiner can normally be reached on M-F 8:30-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ELVIN ENAD can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTN *TTN*

Tuyen T. Nguyen